REMARKS

Claims 1-30 remain pending in this application. The allowance of claims 1-10 and 25-30, and the indication that claims 12, 21 and 22 are directed to allowable subject matter, are acknowledged with appreciation. Applicant earnestly requests reconsideration of the rejection of claims 11, 13-20, 23 and 24.

Claims 11, 13-16 and 18-20 continue to stand rejected under 35 USC § 103(a) as being unpatentable over Lonn (US 5,777,332) in view of Pierfitte (US 6,204,503). This ground of rejection again is respectfully traversed. The comments at pages 7-8 of the Office action have been duly noted. However, notwithstanding such comments, it is submitted that the claimed invention is distinct from the applied prior art combination, and therefore further reconsideration of the claims is requested based on the following discussion.

Independent Claim 11 requires the steps of moving, relative to the patient, a first (and second) detector toward said patient to a position adjacent to said patient, based on an output of a sensor that senses patient proximity to said first (and second)detector, calculating an orbital path of said first and second detectors around the patient based upon said positions adjacent to said patient, and using the calculated orbital path to move said first and second detectors about said patient to obtain image data of said patient.

The Office action alleges that Lonn discloses moving a detector toward a patient to a position adjacent to the patient based on output of a proximity sensor, and calculating an orbital path based upon that position. This is not correct. The invention of Lonn is not to an orbital path calculation process *per se*, but instead is to adjust the pitch axis of a detector to bring the detector close to the patient at every view, with the detector tilt being adjusted with the pitch axis so that the collimator face is parallel to the axis of rotation, and wherein patient table position is adjusted longitudinally so that the organ of interest is imaged in substantially the same transverse slices. Col. 5, ll. 15-20.

At col. 7, Lonn discloses a procedure by which <u>an operator</u> pitches the detector in toward the patient table at each of a number of reference positions, and marks the position by pressing a SET key on a handheld controller. Col. 7, ll. 7-9. The marked

positions are then used by the system to produce an ellipse for the upper half of the patient outline. Lonn further states at ll. 23-27 that the method of determining the outline could also employ an auto-sensing mechanism, which allows positioning of the detector close to the outline without requiring pre-determined reference positions.

Thus, in an embodiment where a set-up procedure is used to produce an ellipse for an upper half of an outline, Lonn teaches the use of a manual operator adjustment of detector position toward the patient/table outline. Alternatively, Lonn states that the detector could be positioned close to the outline without requiring predetermined reference positions by using an auto-sensing mechanism. As such, the use of the "auto-sensing mechanism" does not result in the calculation of an ellipse, but instead is used as an on-the-fly mechanism to position the detector during scanning. This method of scanning is further described in Lonn at col. 4, ll. 41-60. Clearly, if there are no reference positions, no pre-scan orbital path could be calculated as required in claim 11. It is noted that Lonn's entire discussion of calculation of the ellipse describing the orbit at col. 8, ll.18-55 relied on in the Office action are premised upon the pitch positions set by the operator at the reference points. Col. 8, ll. 7-9. It is clear that Lonn fails to disclose calculation of an orbital path based on sensor-based movement of detector heads, as required by the present claims.

The Office action relies on Pierfitte et al., U.S. Patent No. 6,204,503 as suggesting the addition of a second detector head to Lonn. Pierfitte, however, does not suggest modifying the Lonn patient alignment procedure in a manner that would result in the claimed invention. Pierfitte is directed to orienting a pair of detector heads to a sighting center P while the heads rotate about a center of rotation I that is offset from the sighting center P. Pierfitte does not disclose any method of calculating an orbital path for a detector about a patient.

Similar to claim 11, claim 13 requires "a first (and second) carrier mechanism configured to move said first (and second) detector element in a first (and second) direction from a position distal to the patient to a first (and second) position proximate to said patient" and "a control united configured to calculated an orbital path … based upon said fist and second positions." As described above, the Lonn reference does not

disclose moving a detector toward a patient to a position adjacent to the patient based on output of a proximity sensor, and calculating an orbital path based upon that position.
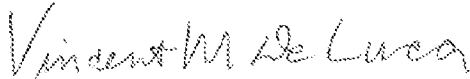
The rejection of claim 17 as being unpatentable over Lonn in view of Pierfitte and further in view of Gagnon, U.S. Patent No. 6,147,353 also is traversed. The Examiner adds Gagnon as disclosing a dual-headed camera with parallel-hole collimation. However, since claim 17 includes all of the limitations of claim 13, and Gagnon fails to cure the deficiencies of the primary prior art references with respect to claim 13, the addition of Gagnon cannot render claim 17 unpatentable. Withdrawal of this ground of rejection is requested.

Finally, the rejection of claims 23 and 24 as being unpatentable over Lonn in view of Pierfitte and further in view of Stephan, U.S. Patent No. 5,677,535, also is traversed. The Office action relies on Stephan as disclosing light sensors emitting beams that are broken by proximity to a patient. While Stephan discloses the use of three sensing planes 13, 14 and 15 across the face of a collimator (Fig. 2) to keep a patient 10 within the boundaries of planes 13 and 14 and away from boundary 15, Stephan does not suggest calculation of any orbital path about a patient. Thus, the addition of Stephan to the proposed combination fails to render obvious claims 23 or 24, both of which include all the limitations of claim 13

Conclusion

Favorable reconsideration of this application and the issuance of a Notice of Allowance are earnestly requested. Should any issues remain outstanding, the Examiner is requested to contact the undersigned by telephone to expedite conclusion of prosecution of this application.

Please charge any fee or credit any overpayment pursuant to 37 CFR 1.16 or 1.17 to Novak Druce Deposit Account No. 14-1437.

RESPECTFULLY SUBMITTED,					
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